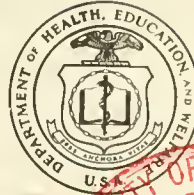


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## COMMUNICABLE DISEASE CENTER

# Morbidity and Mortality



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WEEKLY  
REPORTSeptember 24, 1966  
Week Ending

OCT 19 1966

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE PUBLIC HEALTH SERVICE

## EPIDEMIOLOGIC NOTES AND REPORTS

### HUMAN RABIES DEATH - South Dakota

A 10-year-old boy from Bryant, South Dakota, died of rabies on September 5, 1966. On August 3 the boy had been sleeping in his parents' backyard in a sleeping bag. He was awakened when a striped skunk (*Mephitis mephitis*) bit him on the right thigh after apparently crawling into the sleeping bag with the boy. While attempting to get away from the skunk, the boy received additional bites on the wrist, the fingers of both hands, and behind the right ear.

The skunk escaped, but what is believed to be the same animal was shot several hours later by the boy's father. This skunk was confirmed as rabid by Seller's

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stain and direct fluorescent microscopy procedures at the South Dakota State Veterinary Diagnostic Laboratory, Brookings, South Dakota.

A local physician cleansed the child's bite wounds with phisoex and water and then painted them with tincture of merthiolate. A booster dose of tetanus toxoid was given at that time.

(Continued on page 326)

## CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

(Cumulative totals include revised and delayed reports through previous weeks)

DISEASE	38th WEEK ENDED		MEDIAN 1961 - 1965	CUMULATIVE, FIRST 38 WEEKS		
	SEPTEMBER 24, 1966	SEPTEMBER 25, 1965		1966	1965	MEDIAN 1961 - 1965
Aseptic meningitis	174	77	94	2,096	1,449	1,431
Brucellosis	5	9	9	167	188	306
Diphtheria	10	2	9	140	112	184
Encephalitis, primary:						
Arthropod-borne & unspecified	72	79	---	1,541	1,304	---
Encephalitis, post-infectious	9	7	---	600	549	---
Hepatitis, serum	33			1,004		
Hepatitis, infectious	588	677	738	23,278	24,812	31,872
Measles (rubeola)	375	624	627	189,859	240,837	387,689
Poliomyelitis, Total (including unspecified)	—	2	10	70	46	276
Paralytic	—	2	6	66	39	235
Nonparalytic	—	—	---	—	6	---
Meningococcal infections, Total	28	35	31	2,744	2,352	1,802
Civilian	26	35	---	2,468	2,170	---
Military	2	—	---	276	182	---
Rubella (German measles)	216	---	---	41,901	---	---
Streptococcal sore throat & Scarlet fever	4,756	4,705	4,132	314,932	293,530	255,340
Tetanus	4	4	---	132	196	---
Tularemia	6	3	---	125	190	---
Typhoid fever	10	5	15	276	302	383
Typhus, tick-borne (Rky. Mt. Spotted fever)	4	3	---	209	228	---
Rabies in Animals	66	85	61	3,124	3,327	2,879

## NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax	4	Botulism	4
Leptospirosis: Iowa-1, Tenn.-1	50	Trichinosis: NYC-1	74
Malaria: NYU-1, Pa-3, Md-4, NC-3, Ala-3, Ore-1, Io-2, Ky-2, Cal-2, Ga-1	289	Rabies in Man	1
Psittacosis	34	Rubella, Congenital Syndrome	20
Typhus, murine Tex.-1	20	Plague	4

## HUMAN RABIES DEATH—South Dakota (Continued)

Eleven ml. of antirabies serum was given within 15 hours of the exposure. Approximately one-half the volume was infiltrated around the bite wounds and one-half injected intramuscularly. The child was started on duck embryo origin rabies vaccine the same day and thereafter received a 1 ml. dose daily for the following 21 days. During this course of treatment he received Benadryl, 50 mg q.i.d.

Twenty-four days after the exposure the boy developed a severe headache. There were no prior symptoms except for "a funny feeling" in the fingers of the right hand before onset of headache. He was hospitalized at DeSmet, South Dakota, the following day when he developed a fever of 104°F. About 48 hours after the onset of headache he became irrational. There was a short period of hyperexcitability, laryngeal spasm and increased salivation, followed by coma.

The boy was transferred to Sioux Valley Hospital, Sioux Falls, South Dakota, on September 1, 1966. At this time he responded only to deep pain. Deep tendon reflexes were diminished, more so in the upper than lower extremities. He remained comatose until death on September 5, 1966.

Therapy included ACTH, instituted early in the course of illness because of the possibility that symptoms might be a vaccine reaction. Subsequent treatment in-

cluded tracheostomy, steroids for hypotension and urea to reduce cerebral edema.

Tissues were submitted to the State Health and CDC Laboratories for microscopic examination and virus isolation. Impression smears from the brain, lungs, and salivary glands were negative on direct fluorescent microscopic examination. A positive virus isolation was made in mice and the brains from the first mouse passage were positive by direct fluorescent microscopy for rabies. Preliminary immunologic tests on blood serum drawn terminally, using the indirect fluorescent antibody technique, were positive.

(Reported by Ben Diamond, Director of Laboratories, South Dakota State Department of Health; and the CDC Rabies Investigations Laboratory.)

## Editorial Note:

This clinical failure illustrates the limitation of present rabies prophylactic procedures. In spite of nearly ideal management including thorough cleansing of the wounds, infiltration with antirabies serum and a full course of vaccine, the patient developed rabies in less than 30 days from time of the bites. Skunks are known to excrete higher titers of virus in their saliva than other rabid animals. Bites involving the fingers and face, anatomical areas heavily supplied with nerve endings, are known to carry a greater hazard of disease.

## DIPHTHERIA—South Carolina

On June 18, 1966, a 10-year-old Negro boy died in Columbia, South Carolina, after an 8-day illness characterized by fever, sore throat and respiratory distress. Nasopharyngeal and throat cultures grew out a toxigenic strain of *C. diphtheriae*. After the death of this boy, 21 additional cases and 21 carriers were discovered. The epidemic reached its peak during the week ending August 6, when seven new cases were diagnosed. All cases occurred among the nonwhite, lower socioeconomic populace. Twenty of these were below the age of 15 years; 8 occurred in the 1-4 year age group. The index case and a 1½-year-old male infant died. No new cases have been reported since September 6.

Both patients who died and 15 other clinically ill persons definitely had not been immunized against diphtheria. In three other cases immunization was inadequate; in one other case it had lapsed. The status was unknown in the remaining case. Only two carriers had received a full course of diphtheria toxoid previously. All cases, except for the two fatal ones, were clinically mild and without complications. Of the 43 *C. diphtheriae* strains isolated, 41 were toxigenic. One non-toxigenic strain was recovered from a carrier and another from a patient with a traumatic ocular infection.

The 22 cases were confined to the city of Columbia which has a population of 97,433 including 29,644 nonwhites (1960 census). In contrast to the absence of reported diphtheria cases since 1957, the recent attack

rate among the nonwhite 1-15 year age group was 18.2 per 10,000. Contact among all but two of the cases and carriers has been established in three distinct geographic foci.

Two weeks after the onset of the initial case, the county health officer decided to culture all members and close contacts of the clinically affected persons. Four hundred cultures were taken by mid-August. Each household contact was treated with 1,000 units of antitoxin and 2.4 million units of procaine penicillin each day until three consecutive throat cultures were negative. The clinically ill patients were treated with 20,000-80,000 units of antitoxin and 2.4 million units procaine penicillin per day.

On July 28, a mass vaccination program was undertaken at a clinic in each of the three epidemic areas. Over 25,000 doses of DT or DTP vaccine have been administered. Eighty to 90 percent of the doses have been given to the nonwhites, the majority to persons less than 20 years of age. A large proportion of this population was known to have been susceptible due to a survey conducted in this area in 1964 to determine the immunization status of the residents; results indicated that at that time only 62 percent of the nonwhite population in the 1-14 year age group had received adequate DTP immunization. (Reported by Dr. G. E. McDaniel, Director, Division of Disease Control, State Board of Health of South Carolina; and an EIS Officer.)

### CURRENT TRENDS ASEPTIC MENINGITIS

During the first 38 weeks of 1966, 2,096 cases of aseptic meningitis were reported to the Communicable Disease Center through the National Morbidity Reporting System. During the comparable period in 1965, 1,449 cases were recorded. Through the first 26 weeks of both years the numbers of reported cases were nearly the same: 765 in 1966 and 742 in 1965.

The increased numbers of cases during recent weeks have been reported primarily from several states along the eastern seaboard (Florida, Massachusetts, New Jersey, New York City, Rhode Island and West Virginia) in addition to California, Louisiana, Mississippi and Texas. Table 1 compares the reported incidence of aseptic meningitis from these 10 states at the end of the 26th and 38th weeks of 1965 and 1966.

Table 1  
States Reporting Significant Increase\* in Incidence of Aseptic Meningitis

State	1965		1966	
	26th Week Ended 7 3	38th Week Ended 9 25	26th Week Ended 7 2	38th Week Ended 9 24
California	228	416	223	515
Florida	45	62	40	106
Louisiana	6	14	16	41
Massachusetts	15	26	6	109
Mississippi	1	2	19	59
New Jersey	14	28	24	96
New York City	21	34	22	63
Rhode Island	2	8	5	53
Texas	76	151	103	251
West Virginia	0	1	4	92

\*Increase of 25 or more cases from end of 38th week in 1965 to end of 38th week in 1966.

No single etiologic agent has been identified to account for the majority of the cases.

### SURVEILLANCE SUMMARY SHIGELLA — Second Quarter, 1966

During the second quarter of 1966, 1,856 shigella isolations from human sources were reported from 53 centers. This represents an 11.6 percent decrease from the 2,099 recoveries reported during the first quarter. The number of isolations notified the first quarter showed a 13.6 percent decrease from the total of 2,429 reported during the fourth quarter of 1965. The seasonal pattern demonstrated in the first two quarters of 1966 has deviated slightly from that of the 1964 and 1965 (Figure 1).

Figure 1  
REPORTED ISOLATIONS OF SHIGELLA



Nineteen serotypes were recorded for the second quarter, three less than for the preceding quarter. The six most frequently reported are listed in Table 2. In this quarter as well as in previous ones, these subgroups have been the most common, accounting for over 85 percent of all isolations. *Shigella sonnei* has consistently held the first rank and *S. flexneri* 2, the second.

Table 2  
The Six Most Frequently Reported Shigella Serotypes  
from Human Sources

Second Quarter 1966				Previous Quarter	
Rank	Serotype	Number	Percent	Rank	Percent
1	<i>S. sonnei</i>	640	34.5	1	36.8
2	<i>S. flexneri</i> 2	464	25.0	2	31.2
3	<i>S. flexneri</i> 3	277	14.9	3	10.0
4	<i>S. flexneri</i> 6	128	6.9	5	4.0
5	<i>S. flexneri</i> 4	108	5.8	4	7.7
6	<i>S. flexneri</i> 1	48	2.6	6	3.6

A regional difference has been recognized among shigella isolations, as a significantly higher percentage of *S. flexneri* isolations has been noted in the South as compared to the North. *S. flexneri* isolations accounted for about 73 percent of all shigella isolations in the southeastern quarter of the U.S., and around 81 percent in the southwestern quarter. In contrast, *S. sonnei* recoveries dominated the isolations from the northeastern and northwestern quarters, where 53 and 75 percent, respectively, were reported.

During April, May and June, 70.8 percent of the shigella isolations were reported from children under 10 years of age, approximately the same percent as in the preceding quarter. Again no sex predilection for shigella was apparent in the second quarter, although a predominance of males among the less than 5-year age group was observed. Of the total second quarter isolations, 348 or 18.8 percent were from families with other members of the same family positive for shigella. This was slightly lower than the percentages reported during the previous two quarters (25.2 and 27.4 percent, respectively).

## SEPTEMBER 24, 1966 AND SEPTEMBER 25, 1965 (38th WEEK)

AREA	ASEPTIC MENINGITIS		BRUCELLOSIS	ENCEPHALITIS			DIPHTHERIA		HEPATITIS		
				Primary including unsp. cases		Post- Infectious			Serum	Infectious	Both Types
	1966	1965		1966	1966	1965	1966	1966	1965	1966	1966
UNITED STATES...	174	77	5	72	79	9	10	2	33	588	677
NEW ENGLAND.....	11	2	-	1	-	1	-	-	3	37	40
Maine.....	-	-	-	-	-	-	-	-	-	12	3
New Hampshire.....	-	-	-	-	-	-	-	-	-	1	6
Vermont.....	-	-	-	-	-	1	-	-	-	-	4
Massachusetts.....	2	2	-	1	-	-	-	-	-	15	18
Rhode Island.....	9	-	-	-	-	-	-	-	-	2	3
Connecticut.....	-	-	-	-	-	-	-	-	3	7	6
MIDDLE ATLANTIC.....	32	4	-	11	16	1	-	-	20	102	131
New York City.....	7	2	-	4	6	-	-	-	13	27	27
New York, Up-State.....	4	1	-	1	-	-	-	-	1	22	33
New Jersey.....	18	-	-	4	4	-	-	-	4	19	37
Pennsylvania.....	3	1	-	2	6	1	-	-	2	34	34
EAST NORTH CENTRAL...	21	15	-	23	19	2	-	-	-	86	148
Ohio.....	7	5	-	22	13	-	-	-	-	25	41
Indiana.....	2	-	-	-	-	-	-	-	-	11	6
Illinois.....	5	6	-	1	5	1	-	-	-	19	23
Michigan.....	3	3	-	-	-	1	-	-	-	27	50
Wisconsin.....	4	1	-	-	1	-	-	-	-	4	28
WEST NORTH CENTRAL...	3	10	2	8	13	-	-	-	1	47	22
Minnesota.....	-	8	-	-	1	-	-	-	1	4	3
Iowa.....	-	-	1	-	1	-	-	-	-	32	4
Missouri.....	1	-	-	7	2	-	-	-	-	4	3
North Dakota.....	2	2	-	-	9	-	-	-	-	1	-
South Dakota.....	-	-	-	-	-	-	-	-	-	-	1
Nebraska.....	-	-	-	-	-	-	-	-	-	3	3
Kansas.....	-	-	1	1	-	-	-	-	-	3	8
SOUTH ATLANTIC.....	58	5	-	2	2	-	2	-	-	53	57
Delaware.....	1	-	-	-	-	-	-	-	-	2	4
Maryland.....	3	1	-	-	-	-	-	-	-	17	10
Dist. of Columbia..	-	-	-	-	-	-	-	-	-	-	-
Virginia.....	6	-	-	-	-	-	-	-	-	4	21
West Virginia.....	41	-	-	1	-	-	-	-	-	2	2
North Carolina.....	1	-	-	1	-	-	-	-	-	10	2
South Carolina.....	-	1	-	-	1	-	-	-	-	1	5
Georgia.....	-	-	-	-	-	-	2	-	-	2	-
Florida.....	6	3	-	-	1	-	-	-	-	15	13
EAST SOUTH CENTRAL...	11	7	-	2	-	1	-	-	1	38	66
Kentucky.....	1	3	-	-	-	1	-	-	-	19	35
Tennessee.....	9	1	-	2	-	-	-	-	1	14	15
Alabama.....	1	2	-	-	-	-	-	-	-	3	12
Mississippi.....	-	1	-	-	-	-	-	-	-	2	4
WEST SOUTH CENTRAL...	9	7	2	13	6	3	8	1	1	40	72
Arkansas.....	-	1	-	4	1	-	-	-	-	5	4
Louisiana.....	-	-	1	3	-	2	8	1	-	7	5
Oklahoma.....	1	-	1	-	-	-	-	-	-	3	-
Texas.....	8	6	-	6	5	1	-	-	1	25	63
MOUNTAIN.....	-	3	-	3	14	-	-	-	-	28	42
Montana.....	-	-	-	-	1	-	-	-	-	-	2
Idaho.....	-	-	-	1	-	-	-	-	-	4	1
Wyoming.....	-	-	-	-	-	-	-	-	-	-	1
Colorado.....	-	-	-	2	12	-	-	-	-	3	6
New Mexico.....	-	-	-	-	1	-	-	-	-	4	20
Arizona.....	-	2	-	-	-	-	-	-	-	12	12
Utah.....	-	1	-	-	-	-	-	-	-	2	-
Nevada.....	-	-	-	-	-	-	-	-	-	3	-
PACIFIC.....	29	24	1	9	9	1	-	1	7	157	99
Washington.....	1	3	-	-	-	1	-	1	-	9	2
Oregon.....	-	-	-	3	3	-	-	-	-	18	7
California.....	27	21	1	6	6	-	-	-	7	128	87
Alaska.....	-	-	-	-	-	-	-	-	-	1	2
Hawaii.....	1	-	-	-	-	-	-	-	-	1	1
Puerto Rico.....	-	-	-	-	-	-	-	-	-	27	52



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CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES  
 FOR WEEKS ENDED  
 SEPTEMBER 24, 1966 AND SEPTEMBER 25, 1965 (38th WEEK) - CONTINUED

AREA	MEASLES (Rubeola)			MENINGOCOCCAL INFECTIONS, TOTAL			POLIOMYELITIS				RUBELLA
	1966	Cumulative		1966	Cumulative		Total		Paralytic		
		1966	1965		1966	1965	1966	1965	1966	1966	
UNITED STATES...	375	189,859	240,837	28	2,744	2,352	-	2	-	66	216
NEW ENGLAND.....	6	2,264	36,817	-	121	120	-	-	-	-	29
Maine.....	-	201	2,796	-	9	16	-	-	-	-	10
New Hampshire.....	-	80	381	-	9	7	-	-	-	-	-
Vermont.....	5	238	1,257	-	4	7	-	-	-	-	-
Massachusetts.....	1	781	19,295	-	49	40	-	-	-	-	5
Rhode Island.....	-	72	3,938	-	13	14	-	-	-	-	1
Connecticut.....	-	892	9,150	-	37	36	-	-	-	-	13
MIDDLE ATLANTIC.....	13	18,013	14,796	9	333	306	-	1	-	-	16
New York City.....	4	8,286	2,399	2	47	53	-	-	-	-	5
New York, Up-State.	3	2,535	4,135	2	93	87	-	-	-	-	9
New Jersey.....	-	1,846	2,574	1	98	80	-	1	-	-	-
Pennsylvania.....	6	5,346	5,688	4	95	86	-	-	-	-	2
EAST NORTH CENTRAL...	86	68,748	55,802	4	430	334	-	1	-	3	76
Ohio.....	11	6,351	8,883	1	116	89	-	-	-	-	4
Indiana.....	-	5,698	1,838	1	77	42	-	-	-	1	4
Illinois.....	5	11,363	2,742	-	79	94	-	-	-	2	18
Michigan.....	40	14,472	26,473	1	115	72	-	1	-	-	17
Wisconsin.....	30	30,864	15,866	1	43	37	-	-	-	-	33
WEST NORTH CENTRAL...	10	8,687	16,527	3	147	122	-	-	-	1	9
Minnesota.....	3	1,643	674	-	34	26	-	-	-	1	-
Iowa.....	3	5,308	8,997	-	22	9	-	-	-	-	7
Missouri.....	-	531	2,588	2	57	52	-	-	-	-	-
North Dakota.....	4	1,088	3,702	-	11	11	-	-	-	-	2
South Dakota.....	-	40	115	-	4	3	-	-	-	-	-
Nebraska.....	-	77	451	-	8	10	-	-	-	-	-
Kansas.....	NN	NN	NN	1	11	11	-	-	-	-	-
SOUTH ATLANTIC.....	42	15,269	24,940	4	459	451	-	-	-	1	25
Delaware.....	-	257	503	-	4	7	-	-	-	-	-
Maryland.....	1	2,106	1,161	-	46	44	-	-	-	-	1
Dist. of Columbia..	1	383	77	-	11	9	-	-	-	-	1
Virginia.....	3	2,174	4,073	1	52	53	-	-	-	-	3
West Virginia.....	26	5,286	13,715	-	28	24	-	-	-	-	11
North Carolina.....	3	487	391	3	118	91	-	-	-	-	-
South Carolina.....	1	657	1,017	-	48	59	-	-	-	-	-
Georgia.....	-	234	617	-	63	57	-	-	-	1	-
Florida.....	7	3,685	3,386	-	89	107	-	-	-	-	9
EAST SOUTH CENTRAL...	26	19,716	13,911	3	242	185	-	-	-	3	12
Kentucky.....	3	4,711	2,574	-	85	73	-	-	-	-	4
Tennessee.....	18	12,301	7,896	2	81	60	-	-	-	-	8
Alabama.....	1	1,686	2,325	1	54	32	-	-	-	1	-
Mississippi.....	4	1,018	1,116	-	22	20	-	-	-	2	-
WEST SOUTH CENTRAL...	78	24,570	30,886	2	375	307	-	-	-	55	-
Arkansas.....	-	971	1,084	-	35	15	-	-	-	-	-
Louisiana.....	-	99	106	-	138	170	-	-	-	1	-
Oklahoma.....	3	487	203	1	19	19	-	-	-	1	-
Texas.....	75	23,013	29,493	1	183	103	-	-	-	53	-
MOUNTAIN.....	30	11,978	19,717	-	85	73	-	-	-	-	4
Montana.....	4	1,817	3,724	-	4	2	-	-	-	-	-
Idaho.....	7	1,570	2,787	-	5	8	-	-	-	-	-
Wyoming.....	2	161	845	-	6	5	-	-	-	-	-
Colorado.....	2	1,314	5,634	-	46	14	-	-	-	-	-
New Mexico.....	1	1,133	677	-	10	11	-	-	-	-	-
Arizona.....	9	5,300	1,315	-	10	16	-	-	-	-	4
Utah.....	5	640	4,531	-	-	14	-	-	-	-	-
Nevada.....	-	43	204	-	4	3	-	-	-	-	-
PACIFIC.....	84	20,614	27,441	3	552	454	-	-	-	3	45
Washington.....	28	3,565	7,238	-	37	33	-	-	-	2	23
Oregon.....	17	1,801	3,236	-	34	33	-	-	-	-	14
California.....	23	14,587	12,970	3	462	363	-	-	-	1	8
Alaska.....	15	523	185	-	15	18	-	-	-	-	-
Hawaii.....	1	138	3,812	-	4	7	-	-	-	-	-
Puerto Rico.....	42	2,770	2,407	-	10	6	-	-	-	1	4

## Morbidity and Mortality Weekly Report

CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES  
 FOR WEEKS ENDED  
 SEPTEMBER 24, 1966 AND SEPTEMBER 25, 1965 (38th WEEK) - CONTINUED

AREA	STREPTOCOCCAL SORE THROAT & SCARLET FEVER	TETANUS		TULAREMIA		TYPHOID		TYPHUS FEVER TICK-BORNE (Rky. Mt. Spotted)		RABIES IN ANIMALS	
	1966	1966	Cum. 1966	1966	Cum. 1966	1966	Cum. 1966	1966	Cum. 1966	1966	Cum. 1966
UNITED STATES...	4,756	4	132	6	125	10	276	4	209	66	3,124
NEW ENGLAND.....	596	-	3	-	1	1	7	1	3	2	73
Maine.....	30	-	-	-	-	-	-	-	-	1	25
New Hampshire.....	20	-	-	-	-	-	-	-	-	1	25
Vermont.....	26	-	-	-	-	-	-	-	-	-	20
Massachusetts.....	65	-	2	-	1	-	3	-	1	-	3
Rhode Island.....	44	-	-	-	-	-	-	-	-	-	-
Connecticut.....	411	-	1	-	-	1	4	1	2	-	-
MIDDLE ATLANTIC.....	97	1	12	-	-	-	47	-	40	4	192
New York City.....	2	1	5	-	-	-	19	-	-	-	1
New York, Up-State.....	87	-	2	-	-	-	11	-	13	4	179
New Jersey.....	NN	-	1	-	-	-	7	-	12	-	-
Pennsylvania.....	8	-	4	-	-	-	10	-	15	-	12
EAST NORTH CENTRAL...	203	-	16	-	14	4	37	1	18	5	406
Ohio.....	14	-	4	-	3	2	18	-	9	-	187
Indiana.....	40	-	3	-	5	-	3	-	1	-	87
Illinois.....	81	-	3	-	5	1	4	1	8	3	54
Michigan.....	-	-	4	-	-	1	6	-	-	1	33
Wisconsin.....	68	-	2	-	1	-	6	-	-	1	45
WEST NORTH CENTRAL...	214	-	7	1	15	3	26	1	4	18	700
Minnesota.....	1	-	1	-	-	-	-	-	-	1	157
Iowa.....	75	-	1	-	-	-	5	-	-	5	142
Missouri.....	2	-	5	1	9	3	13	1	3	6	215
North Dakota.....	129	-	-	-	-	-	1	-	-	2	32
South Dakota.....	4	-	-	-	2	-	-	-	-	2	76
Nebraska.....	-	-	-	-	2	-	2	-	-	-	21
Kansas.....	3	-	-	-	2	-	5	-	1	2	57
SOUTH ATLANTIC.....	561	-	30	-	10	1	50	1	97	10	407
Delaware.....	16	-	-	-	-	-	1	-	2	-	-
Maryland.....	105	-	3	-	1	-	9	-	25	-	2
Dist. of Columbia..	-	-	-	-	-	-	2	-	-	-	-
Virginia.....	97	-	4	-	2	1	11	-	30	5	211
West Virginia.....	179	-	-	-	1	-	1	-	-	-	47
North Carolina.....	23	-	4	-	3	-	6	1	20	-	4
South Carolina.....	22	-	2	-	1	-	9	-	5	-	-
Georgia.....	4	-	7	-	2	-	2	-	15	5	90
Florida.....	115	-	10	-	-	-	9	-	-	-	53
EAST SOUTH CENTRAL...	1,041	-	15	-	19	-	32	-	36	4	405
Kentucky.....	58	-	2	-	2	-	3	-	8	-	87
Tennessee.....	810	-	2	-	10	-	18	-	22	4	283
Alabama.....	94	-	6	-	4	-	6	-	6	-	16
Mississippi.....	79	-	5	-	3	-	5	-	-	-	19
WEST SOUTH CENTRAL...	483	2	30	5	57	-	28	-	7	14	636
Arkansas.....	1	1	5	2	44	-	2	-	2	4	72
Louisiana.....	-	1	7	-	3	-	8	-	-	3	40
Oklahoma.....	26	-	2	3	7	-	9	-	4	3	163
Texas.....	456	-	16	-	3	-	9	-	1	4	361
MOUNTAIN.....	863	-	2	-	6	-	13	-	3	3	82
Montana.....	16	-	-	-	2	-	-	-	-	-	7
Idaho.....	127	-	-	-	-	-	-	-	-	-	-
Wyoming.....	20	-	-	-	-	-	-	-	-	-	-
Colorado.....	341	-	2	-	-	-	3	-	2	2	17
New Mexico.....	195	-	-	-	1	-	2	-	1	-	13
Arizona.....	52	-	-	-	1	-	4	-	-	-	36
Utah.....	112	-	-	-	2	-	3	-	-	1	2
Nevada.....	-	-	-	-	-	-	1	-	-	-	7
PACIFIC.....	698	1	17	-	3	1	36	-	1	6	223
Washington.....	155	-	-	-	-	-	11	-	-	-	13
Oregon.....	19	-	1	-	-	-	1	-	-	-	4
California.....	454	1	16	-	3	1	22	-	1	6	206
Alaska.....	26	-	-	-	-	-	-	-	-	-	-
Hawaii.....	44	-	-	-	-	-	2	-	-	-	-
Puerto Rico.....	4	2	41	-	-	-	9	-	-	-	12

## Morbidity and Mortality Weekly Report

331

Week No.

DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDED SEPTEMBER 24, 1966

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(By place of occurrence and week of filing certificate. Excludes fetal deaths)

Area	All Causes		Pneumonia and Influenza All Ages	Under 1 year All Causes	Area	All Causes		Pneumonia and Influenza All Ages	Under 1 year All Causes
	All Ages	65 years and over				All Ages	65 years and over		
NEW ENGLAND:	683	410	25	38	SOUTH ATLANTIC:	1,093	530	56	62
Boston, Mass.-----	222	123	9	15	Atlanta, Ga.-----	126	47	6	10
Bridgeport, Conn.-----	38	23	1	-	Baltimore, Md.-----	260	126	10	20
Cambridge, Mass.-----	25	16	4	-	Charlotte, N. C.-----	29	11	2	1
Fall River, Mass.-----	26	19	-	2	Jacksonville, Fla.-----	58	22	2	6
Hartford, Conn.-----	57	29	1	2	Miami, Fla.-----	106	49	2	6
Lowell, Mass.-----	16	10	-	1	Norfolk, Va.-----	41	20	3	3
Lynn, Mass.-----	20	9	-	1	Richmond, Va.-----	54	36	1	-
New Bedford, Mass.-----	34	18	-	2	Savannah, Ga.-----	35	18	3	1
New Haven, Conn.-----	46	34	2	2	St. Petersburg, Fla.-----	71	56	2	2
Providence, R. I.-----	58	30	1	5	Tampa, Fla.-----	68	34	11	1
Somerville, Mass.-----	13	9	1	1	Washington, D. C.-----	193	81	7	11
Springfield, Mass.-----	50	36	2	3	Wilmington, Del.-----	50	30	7	1
Waterbury, Conn.-----	26	16	-	-					
Worcester, Mass.-----	52	38	4	4	EAST SOUTH CENTRAL:	589	315	35	37
MIDDLE ATLANTIC:	3,010	1,733	102	143	Birmingham, Ala.-----	88	49	4	3
Albany, N. Y.-----	40	23	-	1	Chattanooga, Tenn.-----	50	24	6	8
Allentown, Pa.-----	31	19	-	-	Knoxville, Tenn.-----	43	26	2	2
Buffalo, N. Y.-----	137	78	2	4	Louisville, Ky.-----	122	78	11	4
Camden, N. J.-----	49	25	3	3	Memphis, Tenn.-----	113	50	4	10
Elizabeth, N. J.-----	29	16	3	4	Mobile, Ala.-----	38	16	-	3
Erie, Pa.-----	33	17	1	2	Montgomery, Ala.-----	41	22	7	5
Jersey City, N. J.-----	68	38	5	4	Nashville, Tenn.-----	94	50	1	2
Newark, N. J.-----	80	36	3	9	WEST SOUTH CENTRAL:	1,105	587	27	71
New York City, N. Y.-----	1,551	886	44	64	Austin, Tex.-----	37	23	1	3
Paterson, N. J.-----	40	22	3	2	Baton Rouge, La.-----	23	14	2	-
Philadelphia, Pa.-----	390	221	9	21	Corpus Christi, Tex.-----	24	14	-	1
Pittsburgh, Pa.-----	205	105	7	15	Dallas, Tex.-----	162	80	6	6
Reading, Pa.-----	31	27	2	-	El Paso, Tex.-----	37	21	1	2
Rochester, N. Y.-----	110	75	9	4	Fort Worth, Tex.-----	79	49	2	4
Schenectady, N. Y.*-----	23	15	1	1	Houston, Tex.-----	238	108	2	19
Scranton, Pa.-----	35	27	4	2	Little Rock, Ark.-----	55	32	1	3
Syracuse, N. Y.-----	50	31	-	3	New Orleans, La.-----	174	82	4	13
Trenton, N. J.-----	52	30	1	-	Oklahoma City, Okla.-----	63	39	-	2
Utica, N. Y.-----	20	16	3	1	San Antonio, Tex.-----	106	64	2	7
Yonkers, N. Y.-----	36	26	2	3	Shreveport, La.-----	47	22	4	8
					Tulsa, Okla.-----	60	39	2	3
EAST NORTH CENTRAL:	2,584	1,465	69	162	MOUNTAIN:	384	211	15	21
Akron, Ohio-----	72	45	-	3	Albuquerque, N. Mex.-----	38	16	6	4
Canton, Ohio-----	28	18	2	2	Colorado Springs, Colo.-----	20	14	1	-
Chicago, Ill.-----	743	395	24	59	Denver, Colo.-----	117	61	2	8
Cincinnati, Ohio-----	136	76	7	8	Ogden, Utah-----	18	10	2	2
Cleveland, Ohio-----	219	122	2	15	Phoenix, Ariz.-----	66	28	2	4
Columbus, Ohio-----	110	65	5	6	Pueblo, Colo.-----	17	14	-	-
Dayton, Ohio-----	92	52	-	1	Salt Lake City, Utah-----	57	37	-	3
Detroit, Mich.-----	350	202	4	18	Tucson, Ariz.-----	51	31	2	-
Evansville, Ind.-----	40	30	5	1	PACIFIC:	1,674	1,018	26	70
Flint, Mich.-----	88	44	-	2	Berkeley, Calif.*-----	18	12	-	-
Fort Wayne, Ind.-----	39	17	1	5	Fresno, Calif.-----	43	22	-	5
Gary, Ind.*-----	34	16	2	3	Glendale, Calif.-----	39	25	-	-
Grand Rapids, Mich.-----	50	32	-	1	Honolulu, Hawaii-----	38	14	-	3
Indianapolis, Ind.-----	137	76	6	14	Long Beach, Calif.-----	68	50	2	2
Madison, Wis.-----	44	18	1	5	Los Angeles, Calif.-----	601	383	7	26
Milwaukee, Wis.-----	133	84	-	4	Oakland, Calif.-----	72	36	2	4
Peoria, Ill.-----	48	28	1	6	Pasadena, Calif.*-----	39	28	-	1
Rockford, Ill.-----	30	20	5	2	Portland, Oreg.-----	118	70	-	5
South Bend, Ind.-----	34	25	-	1	Sacramento, Calif.-----	65	34	2	5
Toledo, Ohio-----	98	62	3	4	San Diego, Calif.-----	90	57	2	4
Youngstown, Ohio*-----	59	38	1	2	San Francisco, Calif.-----	187	102	5	4
WEST NORTH CENTRAL:	799	467	22	44	San Jose, Calif.-----	46	30	2	2
Des Moines, Iowa-----	63	35	3	3	Seattle, Wash.-----	152	91	4	8
Duluth, Minn.-----	28	22	1	1	Spokane, Wash.-----	42	30	-	1
Kansas City, Kans.-----	38	17	2	5	Tacoma, Wash.-----	56	34	-	-
Kansas City, Mo.-----	111	64	2	3	Total	11,921	6,736	377	648
Lincoln, Nebr.-----	20	13	-	2	Cumulative Totals including reported corrections for previous weeks				
Minneapolis, Minn.-----	112	69	1	10	All Causes, All Ages -----				479,125
Omaha, Nebr.-----	86	43	4	4	All Causes, Age 65 and over-----				274,722
St. Louis, Mo.-----	221	131	8	10	Pneumonia and Influenza, All Ages-----				20,202
St. Paul, Minn.-----	64	35	1	4	All Causes, Under 1 Year of Age-----				25,512
Wichita, Kans.-----	56	38	-	2					

\*Estimate - based on average percent of divisional total.

# SURVEILLANCE SUMMARY SHIGELLA — Second Quarter, 1966

(Continued from page 327)

**Nonhuman**

A total of 17 isolations of shigella was reported during the second quarter of 1966, as summarized in Table 3.

**Table 3**  
**Reported Shigello Serotypes from Nonhuman Sources**

Serotype	No. of Isolations	Reporting Center	Source
<i>S. boydii</i> 1	1	Mich.	Monkey
<i>S. flexneri</i> 1	2	Wisc.	Monkeys
<i>S. flexneri</i> 2	2	Ga.	Research sample
<i>S. flexneri</i> 2b	1	Texas	Lab stock culture
<i>S. flexneri</i> 3	7	Md. (3)	Monkeys
		Wisc. (1)	Monkey
		Fla. (3)	Monkeys
<i>S. flexneri</i> 4a	1	Texas	Lab stock culture
Unknown	1	Wisc.	Monkey
<i>S. flexneri</i> (not typed)	2	Pa.	Monkeys
<b>Total</b>	<b>17</b>		

THE MORBIDITY AND MORTALITY WEEKLY REPORT, WITH A CIRCULATION OF 15,600, IS PUBLISHED AT THE COMMUNICABLE DISEASE CENTER, ATLANTA, GEORGIA.

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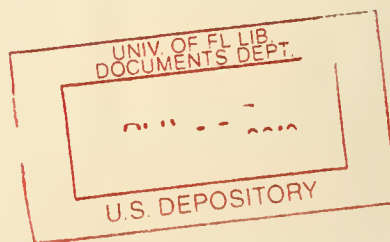
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IN ADDITION TO THE ESTABLISHED PROCEDURES FOR REPORTING MORBIDITY AND MORTALITY, THE COMMUNICABLE DISEASE CENTER WELCOMES ACCOUNTS OF INTERESTING OUTBREAKS OR CASE INVESTIGATIONS WHICH ARE OF CURRENT INTEREST TO HEALTH OFFICIALS AND WHICH ARE DIRECTLY RELATED TO THE CONTROL OF COMMUNICABLE DISEASES. SUCH COMMUNICATIONS SHOULD BE ADDRESSED TO:

THE EDITOR  
MORBIDITY AND MORTALITY WEEKLY REPORT  
COMMUNICABLE DISEASE CENTER  
ATLANTA, GEORGIA 30333

NOTE: THE DATA IN THIS REPORT ARE PROVISIONAL AND ARE BASED ON WEEKLY TELEGRAMS TO THE CDC BY THE INDIVIDUAL STATE HEALTH DEPARTMENTS. THE REPORTING WEEK CONCLUDES ON SATURDAY; COMPILED DATA ON A NATIONAL BASIS ARE RELEASED ON THE SUCCEEDING FRIDAY.

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